

**Flood Control Project Maintenance
Levee Inspections****LMA District Cover Sheet****Spring 2015 Levee Inspection Results****Sutter Maintenance Yard Tisdale Bypass**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)				

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

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SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2015 Levee Inspection Results

Sutter Maintenance Yard Tisdale Bypass

Waterway			Bank	Unit Miles
Unit No. 01 Tisdale Bypass			Left	4.51
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	03/13/2015 - 03/13/2015			
DWR Inspector	Bob Duffey			
Accompanied By	Steve Beckley Sutter Maintenance Yard			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	03/13/2015 03/13/2015	Bob Duffey

LM Start		Rating **	A	Issue No.	2		
LM End		Issue Type +	Ma	Location *	N/A		
Category	Earthen Levee			GPS Latitude/Longitude			
				Start		End	
Item	Operations & Maintenance Manuals				°		°
					°		°
DWR ID	DWR_ST0009_01_s _ 2013_2						
Action/Comments							
Inspector Comments: Sutter Yard has the O&M manuals.							

No Photos

LM Start		Rating **	A	Issue No.	4	
LM End		Issue Type +	Ma	Location *	N/A	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Emergency Supplies & Equipment				°	°
					°	°
DWR ID	DWR_ST0009_01_s _ 2013_4					
Action/Comments						
Inspector Comments: Sutter Yard has a stockpile of emergency supplies and equipment.						

No Photos

LM Start		Rating **	A	Issue No.	5	
LM End		Issue Type +	Ma	Location *	N/A	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Flood Preparedness & Training				°	°
					°	°
DWR ID	DWR_ST0009_01_s _ 2013_5					
Action/Comments						
Inspector Comments: Sutter Yard had flood fight training October 2014.						

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	03/13/2015 03/13/2015	Bob Duffey

LM Start	1.50	Rating **	M	Issue No.	6
LM End	1.50	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.028268 °	39.028268 °
				-121.794308 °	-121.794308 °
DWR ID	DWR_ST0009_01_s_2015_6				
Action/Comments					
Tree or limb					
Inspector Comments: Remove the tree from the waterside toe.					

Photo 1 of 1 : SP_2015_ST0009_286_6_20150406_00002.jpg



View of the tree that is along the waterside toe.

LM Start	2.19	Rating **	M	Issue No.	3
LM End	4.11	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.028173 °	39.028012 °
				-121.781475 °	-121.745665 °
DWR ID	DWR_ST0009_01_s_2012_3				
Action/Comments					
Pole					

Photo 1 of 1 : SP_2015_ST0009_286_3_20150310_00001.jpg



View of the PG&E poles along the landside crown of the levee.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	03/13/2015 03/13/2015	Bob Duffey

LM Start	3.64	Rating **	M	Issue No.	1
LM End	3.64	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.027911 °	39.027911 °
				-121.754224 °	-121.754224 °
DWR ID					

No Photos

Action/Comments					
Inspector Comments: FS_ID:45126 DS_ID:16590 EP_NO: 14740 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 5/7/2015 Marker on WS shoulder missing 5/20/2013 Carsonite marker on WS shoulder missing and should be replaced 10/30/2013 Same as last inspection 5/12/2014 Same as last inspection 11/13/2014 Same as last inspection. FIELD_STRUCT_DESC: 4-inch pipe through levee and under channel 2.5 feet below crown. Carsonite signs on both LS and WS shoulder. Gas Wells 200-feet off of LS toe. (Permit No. 14740 - Nahama and Weagant Energy Co.) Drawings available. FS Date: 05/11/2015					

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2015 Levee Inspection Results

Sutter Maintenance Yard Tisdale Bypass

Waterway			Bank	Unit Miles
Unit No. 02 Tisdale Bypass			Right	4.43
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	03/13/2015 - 03/13/2015			
DWR Inspector	Bob Duffey			
Accompanied By	Steve Beckley Sutter Maintenance Yard			

Summer & Winter Inspections

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	03/13/2015 03/13/2015	Bob Duffey

LM Start	0.11	Rating **	M	Issue No.	1
LM End	0.26	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.023760 °	39.024559 °
				-121.818875 °	-121.816344 °
DWR ID	DWR_ST0009_02_s _ 2012_1				
Action/Comments					
Ditch					
Inspector Comments: Monitor the ditch for erosion.					

Photo 1 of 1 : SP_2015_ST0009_287_1_20150406_00408.jpg



View of the agricultural ditch along the landside toe.

LM Start	0.52	Rating **	M	Issue No.	2
LM End	1.74	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.025539 °	39.025398 °
				-121.811540 °	-121.789006 °
DWR ID	DWR_ST0009_02_s _ 2012_2				
Action/Comments					
Ditch					
Inspector Comments: Monitor the ditch for erosion.					

Photo 1 of 1 : SP_2015_ST0009_287_2_20150406_00409.jpg



View of the agriculture ditch next to the landside toe.

LM Start	1.01	Rating **	M	Issue No.	3
LM End	1.01	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.025542 °	39.025542 °
				-121.802468 °	-121.802468 °
DWR ID	DWR_ST0009_02_s _ 2012_3				
Action/Comments					
Note and monitor erosion site.					
Inspector Comments: Sutter Yard needs to monitor the erosion.					

Photo 1 of 1 : SP_2015_ST0009_287_3_20150406_00410.jpg



View of the erosion along the waterside berm.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	03/13/2015 03/13/2015	Bob Duffey

LM Start	1.14	Rating **	M	Issue No.	6	
LM End	1.14	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.025503 °	39.025503 °	
				-121.800053 °	-121.800053 °	
DWR ID						
Action/Comments						
Inspector Comments: FS_ID:45131 DS_ID:16594 EP_NO: 267 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 5/7/2015 Burrowing near WS toe stil present. Burrowing along downstream side of concrete vault on WS Toe. May need to be grouted 6/20/2013 Same as last inspection 10/30/2013 Same as last inspection 5/12/2014 Same as last inspection 1/13/2014 Same as last inspection. FIELD_STRUCT_DESC: 54-inch concrete pipe through levee, 29.5 feet below the crown. Slide gates on both ends. Waterward end gate in 5- foot by 6-foot concrete box. Landward end gate in concrete "U" headwall. Siphon pipe under and across bypass, steel concrete encased. (Permit No. 267 & 290 - Sutter Basin Water Co.) FS Date: 05/11/2015						

No Photos

LM Start	1.19	Rating **	M	Issue No.	290
LM End	1.19	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.025490 °	39.025490 °
				-121.799240 °	-121.799240 °
DWR ID	DWR_ST0009_02_s _ 2015_290				
Action/Comments					
Note and monitor erosion site. Inspector Comments: Sutter Yard needs to monitor the erosion along the berm.					

Photo 1 of 1 : SP_2015_ST0009_287_290_20150406_00411.jpg



View of the erosion along the waterside berm.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	03/13/2015 03/13/2015	Bob Duffey

LM Start	1.29	Rating **	M	Issue No.	4
LM End	1.29	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.025478 °	39.025478 °
				-121.797232 °	-121.797232 °
DWR ID	DWR_ST0009_02_s_2013_4				
Action/Comments					
Schedule repair of erosion site prior to the next inspection.					
Inspector Comments: Sutter Yard needs to monitor the erosion.					

Photo 1 of 1 : SP_2015_ST0009_287_4_20150310_00004.jpg



View of the erosion along the waterside berm.

LM Start	1.50	Rating **	M	Issue No.	5
LM End	1.50	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.025446 °	39.025446 °
				-121.793347 °	-121.793347 °
DWR ID	DWR_ST0009_02_s_2013_5				
Action/Comments					
Schedule repair of erosion site prior to the next inspection.					
Inspector Comments: Sutter Yard needs to monitor the erosion.					

Photo 1 of 1 : SP_2015_ST0009_287_5_20150310_00005.jpg



View of the erosion along the waterside berm.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	03/13/2015 03/13/2015	Bob Duffey

LM Start	4.21	Rating **	M	Issue No.	7
LM End	4.21	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.024079 °	39.024079 °
				-121.743420 °	-121.743420 °
DWR ID					

No Photos

Action/Comments					
Inspector Comments: FS_ID:45125 DS_ID:23099 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 5/7/2015 Crossing is in good condition. No noticeable issues to report. Need to identify permit for crossing. 10/30/2013 Same as last inspection. 5/12/2014 Same as last inspection. 11/13/2014 Same as last inspection. FIELD_STRUCT_DESC: Natural gas pipeline markers on LS shoulder and toe and WS shoulder and toe. No photos available. FS Date: 05/11/2015					

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement